

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 January 2004 (29.01.2004)

PCT

(10) International Publication Number  
**WO 2004/008984 A1**

(51) International Patent Classification<sup>7</sup>: **A61C 8/00**,  
A61F 2/02, A61L 27/06

2B, S-431 30 Mölndal (SE). HANSSON, Stig [SE/SE];  
Gåsmossen 32, S-436 39 Askim (SE).

(21) International Application Number:  
PCT/SE2003/000722

(74) Agent: **AWAPATENT AB**; Box 11394, S-404 28 Göte-  
borg (SE).

(22) International Filing Date: 6 May 2003 (06.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0202271-3 19 July 2002 (19.07.2002) SE

(71) Applicant (for all designated States except US): **ASTRA  
TECH AB** [SE/SE]; Aminogatan 1, S-431 21 Mölndal  
(SE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ (utility model), CZ, DE (utility model), DE, DK (utility  
model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI  
(utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID,  
IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,  
NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,  
ZA, ZM, ZW.

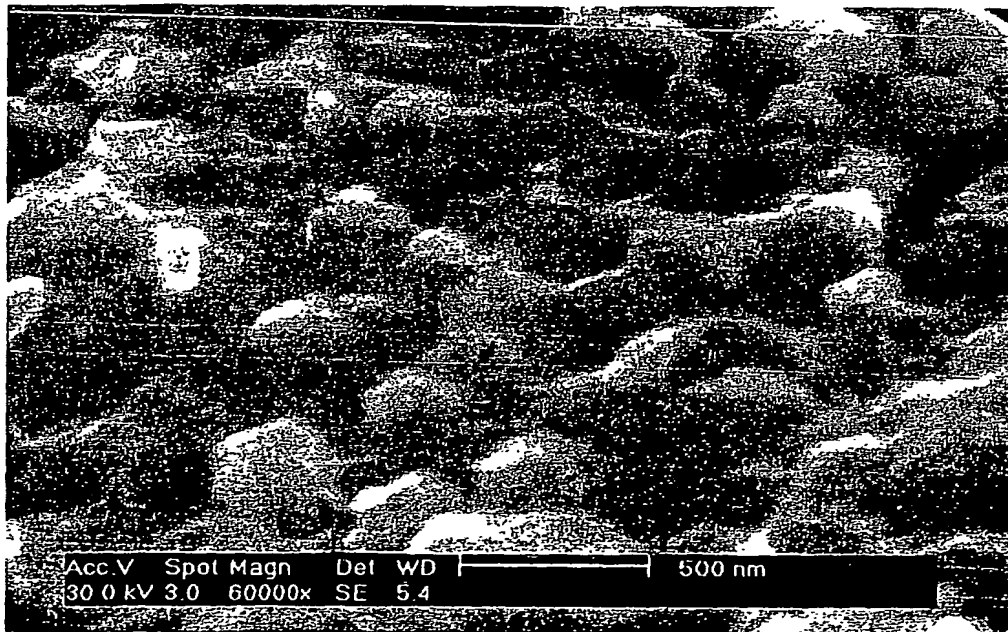
(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **PETERSSON**,  
Ingela [SE/SE]; Godhemsgatan 22A, S-414 68 Göte-  
borg (SE). **JUNEMO-BOSTRÖM**, Kristina [SE/SE];  
Barefjällsgatan 3, S-415 06 Göteborg (SE). **JOHANS-  
SON-RUDÉN**, Gunilla [SE/SE]; Bergstigen 20, S-436 42  
Askim (SE). **ANDERSSON**, Fredrik [SE/SE]; Brogatan

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: AN IMPLANT AND A METHOD FOR TREATING AN IMPLANT SURFACE



(57) Abstract: The invention relates to a method for treating an implant surface intended for implantation into bone tissue wherein a microroughness comprising pores and peaks having a pore diameter of  $\leq 1 \mu\text{m}$ , a pore depth of  $\leq 500 \text{ nm}$ , and a peak width, at half the pore depth, of from 15 to 150 % of the pore diameter is provided. The invention also relates to an implant comprising a surface having the above characteristics.

**BEST AVAILABLE COPY**

WO 2004/008984 A1